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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,174	01/02/2002	Brian C. Ramey	BEA920010036US1	9102

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LIEBERMAN & BRANDSDORFER, LLC
12221 MCDONALD CHAPEL DRIVE
GAITHERSBURG, MD 20878

EXAMINER

KOROBOV, VITALI A

ART UNIT PAPER NUMBER

2155

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/040,174

Applicant(s)

RAMEY, BRIAN C.

Examiner

Vitali Korobov

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2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Amendment

1. This Office Action is in response to the amendment filed 06/30/2005.

Claims 1 – 19 are pending in this Office Action.

Paper Submitted

2. It is hereby acknowledged that the following papers have been received and placed of record in the file: Affidavit submitted under 37 CFR 1.132 as received on 06/30/2005 was considered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 12, 14-16, 18, 19 are rejected under 35 U.S.C. 102(e) as being anticipated by U. S. Patent No. 6813777 B1 by Weinberger et al., (hereinafter Weinberger).

With respect to claim 1, Weinberger teaches a method for remotely communicating with a computer system operable in a headless environment (Col. 4, line 57 – 62), comprising: (a) routing communication from a first partition of the system to a

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service processor (Fig. 1, item 231); and (b) routing communication from said service processor to a remote console (Col. 4, line 62 – 67; Fig. 121, item 121 – remote console).

With respect to claim 2, Weinberger teaches the method of claim 1, wherein the step of routing communication from said first partition to said service processor includes utilizing a UART communication channel (Col. 28, lines 17 – 19).

With respect to claim 3, Weinberger teaches the method of claim 1, wherein the step of routing communication from said service processor to said remote console includes utilizing an Ethernet connection (Col. 57, lines 60 – 63).

With respect to claim 4, Weinberger teaches the method of claim 1, further comprising the step of routing communication from one of a plurality of partitions to said service processor through a multiplexer (Col. 20, lines 14 – 24).

With respect to claim 5, Weinberger teaches the method of claim 4, further comprising the step of selecting one of said plurality of partitions for communication between said multiplexer and said service processor through a multiplexer control (Col. 20, lines 43 – 46; Col. 30, lines 62 – 66).

With respect to claim 6, Weinberger teaches the method of claim 4, wherein the step of routing communication from one of said plurality of partitions to said service processor includes utilizing standard UART signals (Col. 28, lines 17 – 19).

With respect to claim 7, Weinberger teaches a computer system operable in a headless environment comprising: a first partition (Fig. 1, overhead equipment partition 230); a service processor to manage a communication between said first partition and a

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remote console (Fig. 1, service manager 231); and a UART communication channel to transfer said communication between said first partition and said service processor (Col. 31, lines 11 – 15).

With respect to claim 8, Weinberger teaches the system of claim 7, further comprising a multiplexer to direct communication between one of a plurality of partitions and said service processor (Col. 20, lines 14 – 24).

With respect to claim 9, Weinberger teaches the system of claim 8, further comprising a multiplexer control to select one of said partitions for communication with said service processor (Col. 20, lines 43 – 46; Col. 30, lines 62 – 66).

With respect to claim 10, Weinberger teaches the system of claim 8, wherein said multiplexer directs said communication through said UART channel (Col. 31, lines 11 – 15).

With respect to claim 11, Weinberger teaches the system of claim 7, wherein said service processor receives and transmits commands with said remote console through an Ethernet connection (Col. 57, lines 60 – 63).

With respect to claim 12, Weinberger teaches a method for remotely communicating with a computer system operable in a headless environment comprising: (a) routing communication from a first partition of the system to a multiplexer (Fig. 5a, audio in 1 partition communication is routed to multiplexer 352); (b) routing communication from a second partition of the system to a multiplexer (Fig. 5a, audio in 2 partition communication is routed to multiplexer 352); and (c) routing communication from said multiplexer to a remote console (Fig. 5a, multiplexer output

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routed to service processor 231, which in turn, as shown on Fig. 1, routes it to remote console 121).

With respect to claim 14, Weinberger teaches the method of claim 12, wherein the step of routing communication from said multiplexer to said remote console includes utilizing a UART communication channel (Col. 31, lines 11 – 15).

With respect to claim 15, Weinberger teaches the method of claim 12, further comprising the step of selecting one of said partitions for communication from said multiplexer to said remote console through a multiplexer control (Col. 20, lines 43 – 46; Col. 30, lines 62 – 66).

With respect to claim 16, Weinberger teaches a computer system operable in a headless environment, comprising: a first partition (Fig. 5a, Audio IN 1); a second partition (Fig. 5a, Audio IN 2); a multiplexer to manage a communication between one of said partitions and a remote console (Fig. 5a, MUX 352); and a UART communication channel to transfer said communication between one of said partitions and said remote console (Col. 31, lines 11 – 15).

With respect to claim 18, Weinberger teaches the system of claim 16, further comprising a multiplexer control to select one of said partitions for communication with said remote console (Col. 20, lines 43 – 46; Col. 30, lines 62 – 66).

With respect to claim 18, Weinberger teaches the system of claim 16, wherein said multiplexer receives and transmits commands with said remote console through an Ethernet connection (Col. 57, lines 60 – 63).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinberger above, and further in view of U. S. Patent No. 4189769 by Cook et al. (hereinafter Cook).

With respect to claim 13, Weinberger teaches the method of claim 12, but fails to explicitly teach the further limitations of claim 13, wherein the step of routing communication from one of said partitions of the system to the multiplexer includes utilizing a UART communication channel. Cook on the other hand teaches the step of routing communication from one of said partitions of the system to the multiplexer includes utilizing a UART communication channel. (Col. 76, lines 15 – 21; also Fig. 6D, input multiplexer 24.sub.x1, UART 31 and UART multiplexer 27.sub.x). Weinberger and Cook are analogous art because they are both related to routing multiplexed data to peripheral devices. Therefore, it would have been obvious to one having ordinary skills in the art at the time the invention was made to combine the teachings of Weinberger with the teachings of Cook in order to simplify the expansion of system capability for handling a greater number of peripheral devices on a simple economic basis while increasing data-transfer rates and reducing access errors in individual transfer operations (Cook, last sentence of the Abstract).

With respect to claim 17, Weinberger teaches the system of claim 16, but fails to explicitly teach the further limitations of claim 16, wherein said partitions communicate with said multiplexer through a UART communication channel. Cook on the other hand teaches the system wherein said partitions communicate with said multiplexer through a UART communication channel. (Col. 76, lines 15 – 21; also Fig. 6D, input multiplexer 24.sub.x1, UART 31 and UART multiplexer 27.sub.x). Weinberger and Cook are analogous art because they are both related to routing multiplexed data to peripheral devices. Therefore, it would have been obvious to one having ordinary skills in the art at the time the invention was made to combine the teachings of Weinberger with the teachings of Cook in order to simplify the expansion of system capability for handling a greater number of peripheral devices on a simple economic basis while increasing data-transfer rates and reducing access errors in individual transfer operations (Cook, last sentence of the Abstract).

5. **Examiner's note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Response to Arguments

6. Applicant's arguments filed 06/30/2005 have been fully considered but they are not persuasive.

The Applicant argues – *“There is no teaching in Weinberger et al. for utilizing a Service Processor to communicate between a remote console and a quad”*.

The Examiner respectfully submits that quad is not mentioned in any of the claims.

The Applicant argues – *“However, there is no provision in the system of Weinberger et al. for utilizing a Service Processor hardware to provide diagnostic support to the server in the event of a requirement for diagnosis or maintenance of server hardware.”*

The Examiner respectfully submits that there is no mention of diagnosis or maintenance of server hardware in any of the claims.

The Applicant argues – *“In fact, there is no teaching anywhere in the 185 pages of the Weinberger et al. patent for a processor whose sole function is to control hardware and provide diagnostic support”*.

There is also no mention anywhere in the 19 claims, or anywhere in the Applicant's disclosure for that matter, of any “diagnostic support”, either provided by a Service Processor, or provided by any other unit of the system.

The Applicant argues – *”A headless operating system requires that local console input/output dependencies be removed from the operating system, i.e. in a headless environment the operating system supports operating without a keyboard, mouse or monitor directly attached to the system.” Applicant's Specification, Page 1, lines 18-21.”*

The Examiner respectfully would like to point out that Service Processor 231 of Weinberger does not have a keyboard, a mouse or a monitor directly attached to the system, and therefore, by the Applicant's own definition, constitutes a headless environment.

The Applicant argues – *"However, Weinberger et al. does not utilize a UART"*.

The Examiner respectfully refers the Applicant to Col. 28, lines 17-19 of Weinberger et al. that read: "...a TTL UART interface to a seat telephone box (STB) 303, a TTL UART interfaces to the passenger control units 121...". There are several other instances of UART in the invention of Weinberger et al.

The Applicant argues – *"Absent Applicant's invention, there is no suggestion or motivation within Cook et al. for such suggestion."*

The Examiner respectfully refers the Applicant to the above rejection of claim 13 that states: "Weinberger and Cook are analogous art because they are both related to routing multiplexed data to peripheral devices. Therefore, it would have been obvious to one having ordinary skills in the art at the time the invention was made to combine the teachings of Weinberger with the teachings of Cook in order to simplify the expansion of system capability for handling a greater number of peripheral devices on a simple economic basis while increasing data-transfer rates and reducing access errors in individual transfer operations (Cook, last sentence of the Abstract).

With respect to the "Declaration of Paul E. McKenney Under 37 C.F.R. §1.132", §9 of the Declaration states: *"... it is generally recognized in the computer science field that the terminology of "service processor" is a computing device, embedded within*

another computer system, that can be used to monitor, control, configure, manage, diagnose, or maintain that other larger computer system."

The Examiner agree that the concept of service processors is old and well known in the art. (As a matter of general interest, the Examiner would like to cite the U. S. Patent 5,781,434 to Tobita et al., filed on Oct. 13, 1995, and issued on July 14, 1998). However, if all of these features of "service processors" are "generally recognized in the computer science field", the Examiner fails to see the patentable subject matter related to "service processor" in the Applicant's claims. There are no claims directed to the features of the Applicant's "service processor" that would distinguish it from what is "generally recognized" and well known in the computer science field.

§§10-14 of the Declaration further elaborate on what is generally recognized in the computer science field with respect to "service processors" failing to point out the patentable subject matter in the Applicant's claims with respect to the "service processor" that the Applicant invented, or without any reference to the Applicant's claims.

Furthermore, there are no affirmations in the Declaration to the fact that Mr. McKenney has reviewed the referenced patent of Weinberger et al. in light of the Applicant's disclosure.

§15 of the Declaration further states: "... a Service Processor" is a separate CPU, and cannot be used for general-purpose computing tasks."

The Examiner respectfully refers the Applicant to Fig. 7 and related columns of Weinberger that disclose that the service processor 231 of Weinberger has a

microprocessor mP (item 269) and that the service processor 231 is used as a control component in the passenger entertainment system, and cannot be used for general-purpose computing tasks. Therefore, the service processor 231 of Weinberger is a service processor according to the definition presented in the Declaration.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

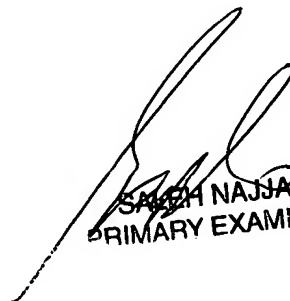
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vitali Korobov whose telephone number is 571-272-7506. The examiner can normally be reached on Mon-Friday 8a.m. - 4:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571)272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vitali Korobov
Examiner
Art Unit 2155

09/07/2005
VAK



SAMIH NAJJAR
PRIMARY EXAMINER